$\begin{array}{c} \text{CHAPTER } 3 \\ \text{Outsourcing Effort to Close Others} \end{array}$

GRÁINNE M. FITZSIMONS

University of Waterloo

ELI J. FINKEL
Northwestern University

Close relationship partners are highly interdependent. This interdependence is often obvious to others-most romantic couples' everyday lives are noticeably meshed or overlapped, as partners share everything from favorite television shows to social networks—but it can also exist in ways that are less tangible or visible to others. According to prominent models of interpersonal cognition (e.g., Aron, Aron, Tudor, & Nelson, 1991; Baldwin, 1992) and recent theorizing from social neuroscience (Coan, 2008), individuals within close relationships possess tightly associated and overlapping cognitive representations of self and other. Although most research on the effects of cognitive interdependence has emphasized its impact on the nature and quality of the relationships themselves, it is likely that these self-other links impact both individuals in important ways as well. Indeed, romantic partners' interdependence has been found to impact basic memory processes, such that partners come to rely on each other's memory for specific domains of knowledge and, as such, fail to retain information about those domains themselves (Wegner, Erber, & Raymond, 1991). According to this research, transactive memory, a system of shared encoding, storing, and retrieving information, allows romantic partners to specialize their own individual memories and together remember a greater amount than they would alone.

In the current chapter, we suggest that the same kinds of processes that encourage the development of transactive memory in close relationships may also extend to the domain of self-regulation (defined as the processes through which the self changes or alters itself to achieve goals; see Baumeister, Vohs, & Tice, 2007). In particular, we speculate that interdependence may lead to the development of transactive self-regulation, a system of shared or dyadic self-regulation that is stronger than the partners' individual systems of self-regulation. Just as partners may rely on each other's help to remember certain types of information, they may also rely on each other's help to make progress on certain goals. If partners rely on each other for self-regulatory help, their overall self-regulatory strength should be increased—by externalizing some of their efforts, they can save their own resources for other self-regulation challenges. However, relying on others can also leave individuals vulnerable to temporary selfregulatory failures, when circumstances promote reliance on the partner. It is this latter idea—that individuals outsource effort to helpful romantic partners—that we examine empirically in this chapter. Before we turn to that research, however, we begin by describing the conceptual background for our research. We first situate our findings within the broader literature on interpersonal effects on self-regulation.

Interpersonal Influences on Self-Regulation

In the field of social psychology, research has tended to describe self-regulation as an intrapersonal process, influenced by individual differences in self-regulatory styles and abilities and situational variables that promote the activation of different cognitive and motivational processes (for a review, see Baumeister, Schmeichel, & Vohs, 2007). For example, research has demonstrated that individuals are especially effective at self-regulation to the extent that they, for example, delay gratification (Mischel, 1974), use self-regulatory resources sparingly and strategically (Baumeister & Heatherton, 1996), believe that they have the requisite skill to achieve their goals (Bandura, 1986), and view setbacks as opportunities to learn (Dweck & Leggett, 1988).

In recent years, however, social psychological research has also documented diverse routes through which interpersonal processes and variables can impact self-regulation (for reviews, see Finkel & Fitzsimons, in press; Fitzsimons & Finkel, 2010). For example, research has demonstrated that individuals are especially effective at self-regulation to the extent that they think of a close relationship partner who values an active goal (Fitzsimons & Bargh, 2003; Shah, 2003). For example, after thinking about their mother, participants were more successful at an academic achievement task if they believed their mother valued their academic achievement

(Fitzsimons & Bargh). Individuals are also more effective at self-regulation to the extent that they have recently experienced efficient (i.e., smooth and easy) rather than inefficient (i.e., difficult, awkward, or challenging) social interactions (Finkelet al., 2006; Richeson & Trawalter, 2005; Vohs, Baumeister, & Ciarocco, 2005). Interpersonal processes have been shown to impact different types of self-regulatory processes, from the content of the goals pursued (Fitzsimons & Bargh) to the resources available to pursue those goals (Finkel et al.). The empirical work described in this chapter extends this burgeoning research on the effects of interpersonal processes on self-regulation by examining an interpersonal influence on the exertion of effort, another important component of self-regulation.

Because self-regulation is a limited resource (Baumeiste, Schmeichel, & Vohs, 2007), and because it is needed for the great majority of everyday goal pursuits, individuals will frequently tax and deplete that resource and will sometimes feel that they don't have sufficient self-regulatory resources to expend effort toward all of their important goals. For example, after a long and stressful day at the office, individuals can then be faced with a whole other set of challenges that require effort, including dealing with family obligations, household chores, and health and fitness goals. In part because of the limited nature of self-regulatory resources, many individuals will find it tough to persist successfully on all their goal pursuits. On an average night, average individuals will abandon healthy dinner plans, consume second helpings of dessert, ignore unpaid bills, and allow their children to watch extra television-not because these individuals don't have goals to eat healthy, do household chores, and spend quality time with their children but simply because they struggle with self-regulation. Indeed, research has consistently shown that all conscious acts of self-regulation draw upon the same limited resource and leave less of the resource available for subsequent acts of self-regulation (see Baumeister et al. for review). For example, research participants who have to resist eating delicious treats subsequently persisted for less time on unsolvable puzzles (Baumeister, Bratslavsky, Muraven, & Tice, 1998).

大の日本のでは、大きのでは、大きのでは、これでは、これでは、これできるとのできる。 ままいからいない はいままで でき

Given the limitations of intrapersonal resources of self-regulation, it seems likely that individuals may turn to their interpersonal environments for assistance with their goal pursuits. Indeed, research in both the close relationships and health subfields of psychology has found strong support for the important role that relationship partners can play in shaping self-regulation (Finkel & Fitzsimons, in press). For example, individuals who have romantic partners who are strongly supportive of their individual goal pursuits (e.g., in academics and fitness) feel more confident about their ability to achieve those goals and are ultimately more likely to achieve them than do individuals who have romantic partners who are less supportive (Brunstein, Dangelmayer, & Schultheiss, 1996; Feeney, 2004).

Although the mechanisms driving these effects of social support on successful self-regulation are not yet agreed upon, researchers have compellingly demonstrated that such effects are robust, at least when it comes to health goals (DiMatteo, 2004; Reblin & Uchino, 2008).

In a program of research on the Michelangelo phenomenon, Rusbult and colleagues have demonstrated one route through which close relationship partners can promote self-regulatory success. According to this research, relationship partners help to bring about each other's ideal self by acting as each other's "sculptors" (see Rusbult, Finkel, & Kumashiro, 2009, for review). Partners who see individuals as already possessing their ideal characteristics and who behave in ways that affirm those characteristics tend to promote or facilitate individuals' growth toward those ideal selfgoals (Drigotas, Rusbult, Wieselquist, & Whitton, 1999).

Other research has demonstrated that, when a given goal is active, individuals tend to feel closer to and more readily approach relationship partners who are instrumental or helpful toward that goal's progress (Fitzsimons & Shah, 2008). These findings indirectly suggest that individuals may lean on their close relationship partners for help with ongoing goal pursuits, an interpretation further supported by a study demonstrating that individuals who draw closer to helpful others for active goals subsequently are more likely to succeed on those goals (Fitzsimons & Shah).

Thus, in addition to making individuals feel more positively about their relationships and more valuable and loved by their partners, supportive partners also help individuals achieve their goals (Brunstein et al., 1996). In the current work, we seek to extend these findings by investigating whether individuals come to rely on supportive partners for help with their goals. In other words, do individuals take advantage of having helpful partners? Do they conserve their own limited self-regulation resources and instead rely on their partners to help them with their ongoing goal pursuits? This work is a first step toward examining the possibility that, within close relationships, the self-regulation system is shared, just like the memory system has been shown to be shared (Wegner et al., 1991). If our research supports the idea that individuals outsource effort to close others, relying on those others to act as external agents of self-regulation, we will have some initial evidence for the existence of a transactive system of self-regulation within close relationships. Just as individuals fail to remember information that they typically rely on their partners to remember (Wegner et al., 1991), we hypothesize that individuals will fail to expend effort on a goal—that is, will reduce engagement of their individual self-regulation system—if they think about how they rely on their partners for help with that goal.

Current Research: Outsourcing Effort to Helpful Others

This chapter describes recent research that examines a novel phenomenon that we have termed self-regulatory outsourcing. By outsourcing, we mean that individuals exert less effort to achieve one of their goals after thinking about how their significant other may be instrumental for helping them achieve that goal. We suggest that when individuals think about how a partner can help with an ongoing goal, they unconsciously "outsource" the self-regulatory effort to their partner. By thinking about how helpful the partner can be, they then feel a greater sense of reliance on the partner for goal progress, and they thus feel less need to use their limited self-regulatory resources to pursue the goal themselves. Thus, they subsequently reduce their own effort. For example, imagine that Benjamin wants to eat less junk food. We suggest that if he thinks about how his wife, Carla, is ruthless about throwing out any candy or snacks around the house, he will feel less motivated to expend his own effort to avoid eating junk food because he will temporarily feel like he can rely on Carla. As another example, imagine that Carla wants to better control her stress. We suggest that if she thinks about how Benjamin calms her down, she will be less motivated to avoid potential triggers of stress because she will feel like she can rely on Benjamin.

The outsourcing hypothesis may seem to contradict past research on the benefits of having social support (e.g., Brunstein et al., 1996), which suggests that having supportive partners can increase self-efficacy and motivation. However, this hypothesis fits well with a number of wellestablished theories of effort exertion from the self-regulation field. For example, individuals have been shown to exert less effort when they feel that they are making satisfactory progress toward their goal (Carver & Scheier, 1990; Fishbach & Dhar, 2005). Perceiving that individuals have made progress is thought to generate positive affect and to reduce their motivation toward further expending effort. Individuals have also been shown to exert less effort when they are aware that others are also expending effort toward a common goal (Latané, Williams, & Harkins, 1979). That is, individuals are likelier to engage in reduced effort when social loafing is a viable route to goal achievement. Finally, individuals have been shown to exert less effort using any specific means to goal progress when they are aware of multiple means or routes to goal achievement (Kruglanski, Shah, Fishbach, Friedman, Chun, & Sleeth-Keppler, 2002). According to research on multiple means to goal attainment, the cognitive link between an overarching goal (e.g., weight loss) and any given means or subgoal (e.g., dieting) is weakened by the existence of links between the goal (weight loss) and other means (e.g., exercise). Potentially, then, thinking about the partner's effort (one means to goal attainment) can reduce people's

strength of engagement with their original means (expending one's own effort). These well-established findings about effort and self-regulation all contribute possible mechanisms for why thinking about a helpful other might have a negative effect on effort expenditure.

Although at first glance this phenomenon may appear self-defeating, our assumption is that, in ongoing relationships, relying on the partner is a reasonable strategy that will often lead to greater overall self-regulatory success. It makes sense to reduce one's own effort expenditure if one's partner can achieve self-regulatory success on one's behalf, because then one can use those conserved resources toward another goal. Whether outsourcing in ongoing relationships is ultimately productive, of course, depends on a number of factors, most obviously the partner's reliability or responsiveness—will help be there in the future? In future research, we hope to explore these variables. In the context of our studies, however, we describe the effects of outsourcing as producing a negative effect, in that it undermines motivation to expend effort toward goal pursuit.

Potential Moderators of Self-Regulatory Outsourcing

In addition to seeking evidence for the basic outsourcing phenomenon, we also examine two potential moderators of this effect. First, we predict that individuals should be most likely to outsource effort when their own self-regulatory resources are low. As we have described, research on depletion theory has argued that all acts of self-regulation draw on one limited resource; tapping that resource by engaging in self-regulation depletes the resource, leaving less available energy for subsequent activities. Depletion is typically demonstrated by individuals' preference for easier tasks and reduced effort on any given task (for reviews, see Baumeister, Schmeichel, & Vohs, 2007; Muraven & Baumeister, 2000). We suggest that individuals who are depleted should be especially likely to show the outsourcing effect. They should be even more likely than their nondepleted counterparts to exhibit less effort after thinking about a helpful partner.

What about individuals who are not depleted but who are concerned that performing a current task will cause them to become depleted—will they reduce their resources for a subsequent task requiring self-regulatory resources? According to resource conservation theory, a recent offshoot of depletion theory, individuals are frequently motivated to conserve their limited resources for a subsequent self-regulatory task, and this motivation causes them to strategically limit resource expenditures on a current task (Muraven, Shmueli, & Burkley, 2006). We suggest that the outsourcing dynamics that undermine self-regulatory exertion in general are particularly powerful when conservation concerns are salient. Relative to individuals who believe that performing a current task will have no impact on their resources for the subsequent goal-relevant task, individuals who

believe that performing a current task will deplete their resources for the subsequent task will conserve more resources for the subsequent task—unless they have outsourced their self-regulatory efforts to their romantic partner. Individuals who have done so should conserve relatively few self-regulatory resources for the subsequent task regardless of whether they perceive that performing the current task will diminish their available resources for the subsequent task.

The Consequences of Self-Regulatory Outsourcing for Relationship Commitment

In addition to seeking evidence for the basic outsourcing effect and to identifying potential moderators of theoretical relevance, we also seek to understand the potential relationship consequences of outsourcing to relationship partners. In particular, we examine the effects of outsourcing on commitment to the helpful partner. Although there is reason to believe that individuals will experience diminished commitment to a relationship partner who is currently undermining their goal-pursuit motivation, we hypothesize that the outsourcing process will increase individuals' relationship commitment. Based on prior work suggesting that individuals feel more positive about others who are instrumental for active goals (Fitzsimons & Shah, 2008), we speculate that when individuals think about how a partner is helpful for the achievement of their goals they will feel more gratitude and appreciation for the partner. In addition, the carefree quality that accompanies demotivation, because it is relaxed and effortless, can be pleasurable; thus, the combination of focusing on how a partner helps individuals achieve their goals while simultaneously experiencing the relaxation associated with self-regulatory outsourcing is likely to be associated with experiencing a particularly strong commitment to their partner. Finally, to the extent that individuals have heightened awareness of how they depend on their partner, they may feel a greater sense of dependence on the partner and thus feel more committed to maintaining the relationship over time.

Overview of the Hypotheses and Studies

We describe three experimental studies that test four related hypotheses stemming from our basic interest in the idea that individuals can outsource effort to their close others. Our primary hypothesis, the outsourcing hypothesis, states that individuals will exhibit diminished motivation toward a given goal when they think about ways a romantic partner helps them achieve that goal. Two of our hypotheses investigate moderators of the outsourcing effect. The depletion hypothesis states that the outsourcing effect should be especially pronounced among depleted individuals, whereas the conservation hypothesis states that it should be especially

pronounced among individuals who believe that exertion on a current task can undermine performance on an important task to be performed moments later. Finally, the *relationship commitment hypothesis* states that, for individuals who have thought about how a romantic partner helps them achieve a given goal, greater outsourcing (i.e., greater reduction in individuals' own effort expenditure on the goal) will predict greater reported commitment to the relationship with this romantic partner.

Experiments 1 and 3 examine these hypotheses in the context of health and fitness goals. There are several reasons we chose to study outsourcing in the context of these specific goals. First, changes to health and fitness behaviors (e.g., eating more fruits and vegetables, cutting down on fat intake, starting a new exercise regimen) are commonly reported personal goals in most adult Western samples. Thus, we can assume that for most of our participants (adult females residing in the United States) this is a currently active goal. Second, the success or failure of health and fitness goals has profound consequences for individuals, perhaps even more so than do most career and financial goals. Failures to eat healthy and to exercise regularly are known to be major causes of physical and mental health problems in addition to strong predictors of premature morbidity (Finkelstein, Ruhm, & Kosa, 2005; Kopelman, 2000). Finally, health and fitness goals are, for many individuals, goals that require a great deal of self-control and effort to be successful. For example, it is widely known that most diets fail (Mann, Tomiyama, Westling, Lew, Samuels, & Chatman, 2007). Although there are many reasons diets tend to fail, one of the primary factors appears to be self-regulatory failure (Stroebe, 2008) because it is challenging for individuals to overcome well-established habits, to resist temptation, and to persist at such changes over time (Rothman, Sheeran, & Wood, 2009). In sum, health and fitness goals are common, important, and challenging and, as such, provide the ideal context for studying interpersonal effects on goal pursuit. Experiment 2 examines these hypotheses within the context of an academic achievement goal to establish that the effect generalizes beyond the health and fitness domain. Our sample for Experiment 2 is an undergraduate sample; thus, academic achievement goals possess the desired characteristics of being common, important, and challenging.

Empirical Tests of the Outsourcing Phenomenon, Moderators, and Consequences

Testing the Outsourcing and Depletion Hypotheses

In Experiment I, we aimed to provide a first test of the outsourcing hypothesis—that individuals will expend less effort (in this case, that individuals will plan to expend less effort) toward a goal when they think about how

their partner helps them achieve that goal. In addition to establishing the basic outsourcing phenomenon, Experiment I also tested the depletion hypothesis—that the outsourcing effect will be stronger under conditions of self-regulatory depletion. Experiment 1 employed a 2 × 2 design, with partner instrumentality (for a health/fitness goal vs. for a career goal) and depletion (low vs. high) as between-subjects variables. As a dependent measure, we assessed participants' willingness to exert effort to achieve their health/fitness goal (the focal goal). In addition, we assessed participants' commitment to their health/fitness goal. We have assumed that outsourcing diminishes the motivation to expend effort to pursue the focal goal without influencing the goal's importance. That is, individuals who outsource effort to a partner should still report caring about health/fitness and hoping to succeed. Outsourcing should change reliance on the partner but should not decrease the importance of the health/fitness goal.

Adult women, recruited from an online data collection service, completed the study online. They first completed a depletion manipulation modified from Muraven, Gagné, and Rosman (2008), in which they retyped a paragraph that appeared onscreen while skipping all vowels (low depletion condition) or while skipping all vowels that appeared two letters after another vowel (high depletion condition). Next, they provided one example of how their partner made it easier for them to do better with their health and fitness goals (focal goal condition) or career goals (control goal condition). Participants then indicated how much time and effort they planned to spend on their health and fitness goals in the upcoming week, using simple one-item Likert measures (1= much less time (or effort) than usual; 5 = much more time (or effort) than usual), and reported their commitment to health and fitness using a two-item scale that asked participants to rate their agreement (1 = I completely disagree; 7 = I completely agree) with the statements, "My health and fitness goals are important to me," and "I care about my progress on my health and fitness goals."

Results supported our hypotheses. As predicted, participants who thought about their romantic partner's instrumentality for their health and fitness goals planned to spend less time and effort pursuing health and fitness than did participants who thought about their partner's instrumentality for their career goals. Importantly, individuals in both conditions reported approximately equal levels of commitment to their health and fitness goals, suggesting that the outsourcing effect on effort expenditure is not driven by a reduction in the importance of the goal. In addition, as predicted, the effect was significantly stronger in the high depletion condition, suggesting that outsourcing may be more likely to occur when individuals have fewer available self-regulatory resources (Muraven et al., 2006). Thus, this first study provided support for both the outsourcing and depletion hypotheses.

Testing the Outsourcing and Conservation Hypotheses

In Experiment 2, we aimed to provide an additional test of the outsourcing hypothesis with a different sample of participants (undergraduate students) and in a different goal domain (academic achievement). We also sought to provide an initial test of the conservation hypothesis—that is, that participants who think about how their partner helps them achieve a given goal will conserve fewer resources for an anticipated goal-relevant task (compared with participants who think about how their partner helps them achieve a different goal). Experiment 2 employed a behavioral measure of effort expenditure instead of the self-report measure of planned effort expenditure that we used in Experiment 1 and included an additional control condition in which participants thought about something they like about their partner. This condition, which should produce positive feelings toward the partner, does not mention helpfulness or goals, and it provided a comparison for the two goal conditions. Experiment 2 employed a 3 × 2 design, with instrumentality condition (the focal goal of academic achievement, the control goal of recreation, and the control nongoal) and task framing (nondepleting, depleting) as between-subjects factors and time spent on distracter task as the dependent measure.

To test the conservation hypothesis, we adapted a procedure from research on the conservation model of self-regulation (Muraven et al., 2006). We manipulated participants' perception of whether an appealing distracter task consumed resources needed for a subsequent task that was strongly relevant for participants' academic achievement goals. Based on research on the conservation model of self-control (Muraven et al.), we used time spent on the first, distracter task as a measure of how much participants were trying to conserve resources for the second, target task-with more time spent on the distracter task indicating diminished emphasis on resource conservation. We predicted that participants would conserve fewer resources for the subsequent, target task (i.e., they would spend more time on the initial, distracter task) when they had thought about how their partner helps them with their academic achievement goal. We also predicted that this pattern would be strongest when participants believed that the two tasks competed for resources (i.e., that the first task would drain resources needed to complete the second target task).

Undergraduate men and women completed the study online. Participants first completed the instrumentality manipulation, a slightly modified version of Experiment 1's manipulation in which participants provided an example of how their romantic partner helped with their ongoing academic achievement goals (the focal goal condition) or an ongoing recreational goal (the control goal condition) or simply reported something that they liked about their partner (the control nongoal condition). Next,

participants learned that that they would first complete an entertaining puzzle task and then a difficult academic task that would teach them skills to improve their multiple-choice test-taking performance. Participants learned that they could divide the remaining study time on the two tasks in whatever fashion they wished. Participants read instructions indicating that spending time on the first task would either drain their resources and make the second task harder and less useful (depleting frame condition) or that it would not drain their resources for the second task (non-depleting frame condition). Participants then spent as much time as they wished on the first task, which consisted of a number of easy word puzzles typically rated as enjoyable in prior research with a similar sample. There was no second task; whenever participants indicated they wished to continue, they received debriefing feedback. If participants reached 7 minutes, the program automatically ended and brought up the debriefing feedback.

Results supported our hypotheses. As predicted, participants spent significantly more time on the distracter task in the focal goal condition than in either of the other two conditions, which did not differ from each other. That is, thinking about how their romantic partner helped with an academic achievement goal led participants to conserve less effort for the academic task (i.e., to expend more energy on the first task), compared with thinking about how their romantic partner helped with another goal or with thinking about something nice about their romantic partner. Importantly, and as predicted, this pattern was significant only when participants thought the first task interfered with the second task. When the two tasks were not described as competing for resources, participants were unaffected by thinking about an instrumental romantic partner.

Testing the Outsourcing and Relationship Commitment Hypotheses

In Experiment 3, we attempted to replicate the basic outsourcing phenomenon and to test our relationship commitment hypothesis. This study followed the procedures of Experiment 1 but did not manipulate depletion condition, added a partner positivity control condition like that in Experiment 2, and, most importantly, assessed relationship commitment at the end of the session. As explained earlier in the chapter, we expected that outsourcing effort to a romantic partner would promote self-reported commitment to that partner.

As in Experiment 1, adult women recruited from an online data collection service completed the study online. They first typed in one example of how their partner helped with their current health and fitness goals (focal goal condition), one example of how their partner helped with their current career goals (control goal condition), or one thing they liked about their romantic partner (control nongoal). Next, they reported how much time they planned to spend pursuing their health and fitness goals in the

upcoming week and completed a two-item relationship commitment measure, which asked them to indicate their agreement with two statements ("I am highly committed to my current partner," and "I believe I will stay with this partner for the rest of my life") on seven-point Likert scales.

Results supported both the outsourcing and relationship commitment hypotheses. Participants reported planning to spend significantly less time pursuing their health and fitness goals in the focal goal condition (i.e., after thinking about how their romantic partner helps with their health and fitness goals) than in either of the other two conditions (i.e., after thinking about how their partner helps with their career goal or about something they like about their partner). In addition, as predicted, participants' planned goal pursuit (i.e., how much time they reported they would spend on health and fitness in the upcoming week) was significantly negatively related to relationship commitment in the focal goal condition, but not in the two control conditions. We predicted, and found, a different relationship between planned goal pursuit and relationship commitment; we did not predict (nor find) a main effect of condition on the commitment measure. We assume that the positive effects of outsourcing processes did not bolster commitment above the level of the other two conditions, because there were other unique positive processes at work in those conditions as well. For example, the help partners gave for career goals was generally bigger in scale and highly positive—participants indicated examples like, "He supports who I am in life," and "He stands by me when I need emotional help," as it was in the positive control condition-participants wrote examples like, "He is the love of my life," and "He makes me a better woman." In contrast, the help partners gave for fitness goals was smaller and sometimes not entirely positive-participants gave examples like, "He watches the baby so I can get to the gym," and "He gives me a bad look when I eat too much." Thus, any main effect of outsourcing processes was likely overwhelmed by these between-goal differences.

Importantly, though, we found the predicted link between outsourcing and commitment in the focal goal condition. In other words, among women who thought about how their partner helps them achieve their health and fitness goals, greater outsourcing (i.e., greater reduction in the women's personal motivation to work hard to achieve the goal) predicted greater relationship commitment.

This latter finding provides some initial support for the idea that outsourcing effort to a romantic partner may generate positive outcomes for the relationship. Although outsourcing was not experimentally manipulated—that is, we did not induce some women to outsource more or less than others—and thus, we cannot say with certainty that outsourcing caused the increase in commitment, the data suggest that benefits may exist for the relationship. We speculate that outsourcing reflects positive qualities of the relationship, as it likely indicates greater reliance and trust in the partner's ability or willingness to help with personal goals. We further speculate that outsourcing may promote positive responses to partners, as it may remind individuals of their dependence on their partner. If the relationship were to end, the individuals would lose this external source of help with goal pursuit and thus may be more motivated to maintain the relationship over time.

General Discussion

In this chapter, we discussed several recent studies that examine a novel phenomenon that we have termed self-regulatory outsourcing, in which individuals exert less effort to achieve a goal after thinking about how a close other helps them to make progress on that goal. We speculate that one reason that the outsourcing effect occurs is that individuals tend to seek to conserve their limited self-regulatory resources, and, thus, when they think about how their partner helps with a goal they relax their own efforts, as a way of conserving resources. This idea is supported by our findings that the outsourcing effect is especially strong when individuals' resources have recently been depleted or when the need to conserve resources is made salient. In addition to seeking evidence for the basic effect and testing these moderators, we also examined the consequences of outsourcing for relationships. Although thinking of a helpful other appears to temporarily undermine individuals' motivation, and thus could potentially cause relationship strife, we hypothesized and found that outsourcing seems to predict positive relationship outcomes, at least in terms of commitment.

The most pressing direction for future research is to examine the possibility that outsourcing serves to promote engagement in other goals. If outsourcing is motivated by a desire to conserve resources, it may allow individuals to invest more resources in other goal pursuits. For example, outsourcing effort to a partner for progress on a health goal may allow an individual to use the conserved resources to pursue an ongoing career goal. This pattern of results would suggest that outsourcing does not have a negative impact on overall self-regulatory success. Indeed, if outsourcing reflects the operation of a broader shared system of self-regulation, then it may well maximize overall success for partners. To test for effects on other goals, future research could add a second task, one relevant to another important goal, to the paradigm used in the current studies. For example, after thinking about how a partner helps with health and fitness (vs. control) and having an opportunity to expend effort on a health and fitness-relevant task, participants would complete a task relevant to academic achievement. We would examine persistence and performance on

the academic achievement task as a measure of motivation to expend effort on that goal. In addition to experimental data, it may also be useful to examine how naturally occurring outsourcing within a relationship affects progress on goals and perceived self-regulatory success over time.

We have discussed the possibility that outsourcing effort to a romantic partner may have positive consequences for relationships because it encourages reliance on the partner and may lead to greater feelings of appreciation of and gratitude to the partner. However, outsourcing likely varies in both occurrence and consequence—that is, it may be likelier to occur within some relationships and for some individuals, and it may have positive consequences for some relationships and negative consequences for others. For example, individuals who are less comfortable with dependence on a partner, such as those who are low in self-esteem, may be less likely to rely on a romantic partner for help with important goals. Individuals who are high in attachment avoidance may similarly be less likely to rely on a partner and may also experience discomfort and seek interpersonal distance when forced to think about reliance on a partner. Qualities of the partner will also likely play a moderating role on the occurrence and relationship consequences of outsourcing. For example, partners who encourage dependence (Feeney, 2004) and partners who are highly committed may both be likely to promote increased outsourcing.

Finally, even if outsourcing has benefits for the goal pursuer, there are aspects of the relationship or situation that might have costs for the partner who provides help. For example, imbalances in support for each other's goals could create burdens on the undersupported partner. If one partner consistently relies on the other for help and support, it may reduce the helpful partner's time and motivation to pursue his or her own goals, and the imbalance may also build resentment in some partners. In a committed long-term relationship, these imbalances may ebb and flow, such that one partner is alternately the primary "outsourcer" and the primary "outsourcee" across time, or they may become quite stable, with one partner being increasingly dependent on the other for help over time. In general, future research should complement the current focus on the recipient of outsourcing help with a focus on the provider of help and the dyadic effects of these kinds of self-regulatory processes. Future research should also include additional measures of relationship quality and functioning as well as measures of relevant individual differences to determine if they affect outsourcing dynamics as studied experimentally and should also investigate how outsourcing impacts relationship quality over time.

As we discussed in the introduction, research has suggested that romantic couples rely on each other's memories and eventually develop a shared memory structure (Wegner et al., 1991). In future research, we hope to extend the current findings about outsourcing effort to romantic

partners to examine the broader idea that couples may develop shared self-regulatory systems, or transactive self-regulation, in which each partner relies on the other for help with their self-regulation tasks. Individuals who rely on their partner for help with self-regulation in one area or with some specific types of self-regulation problems may conserve valuable resources for other self-regulation efforts. If so, despite producing ironically negative short-term effects like the outsourcing effects shown here, such a shared self-regulatory system may ultimately serve to benefit partners if it allows them to best make use of their limited self-regulatory resources over time.

References

- Aron, A., Aron, E. N., Tudor, M., & Nelson, G. (1991). Close relationships as including other in the self. *Journal of Personality and Social Psychology*, 60, 241–253.
- Baldwin, M. W. (1992). Relational schemas and the processing of social information. Psychological Bulletin, 112, 461-484.
- Bandura, A. (1986). Social foundations of thought and action: A social cognitive theory. Englewood Cliffs, NJ: Prentice-Hall.
- Baumeister, R. F., Bratslavsky, E., Muraven, M., & Tice, D. M. (1998). Egodepletion: Is the active self a limited resource? *Journal of Personality and Social Psychology*, 74, 1252-1265.
- Baumeister, R. F., & Heatherton, T. F. (1996). Self-regulation failure: An overview. *Psychological Inquiry*, 7, 1-15.
- Baumeister, R. F., Schmeichel, B. J., & Vohs, K. D. (2007). Self-regulation and the executive function: The self as controlling agent. In A. W. Kruglanski & E. T. Higgins (Eds.), Social psychology: Handbook of basic principles (2nd ed., pp. 516-539). New York: Guilford.
- Baumeister, R. F., Vohs, K. D., & Tice, D. M. (2007). The strength model of self-control. Current Directions in Psychological Science, 16, 351-355.
- Brunstein, J. C., Dangelmayer, G., & Schultheiss, O. C. (1996). Personal goals and social support in close relationships: Effects on relationship mood and marital satisfaction. *Journal of Personality and Social Psychology*, 71, 1006–1019.
- Carver, C. S., & Scheier, M. F. (1990). Origins and functions of positive and negative affect: A control-process view. *Psychological Review*, 97, 19-35.
- Coan, J. A. (2008). Toward a neuroscience of attachment. In J. Cassidy and P. R. Shaver (Eds.), Handbook of attachment: Theory, research, and clinical applications (2nd ed., pp. 241-265). New York: Guilford Press.
- DiMatteo, M. R. (2004). Social support and patient adherence to medical treatment: A meta-analysis. *Health Psychology*, 23, 207-218.
- Drigotas, S. M., Rusbult, C. E., Wieselquist, J., & Whitton, S. (1999). Close partner as sculptor of the ideal self: Behavioral affirmation and the Michelangelo phenomenon. *Journal of Personality and Social Psychology*, 77, 293-323.
- Dweck, C. S., & Leggett, E. L. (1988). A social-cognitive approach to motivation and personality. *Psychological Review*, 95, 256-273.

- el, E. J., Campbell, W. K., Brunell, A. B., Dalton, A. N., Chartrand, T. L., & Scarbeck, S. J. (2006). High-maintenance interaction: Inefficient social coordination impairs self-regulation. *Journal of Personality and Social Psychology*, 91, 456–475.
- el, E.J., & Fitzsimons, G. M. (in press). Effects of interpersonal relationships on self-regulation. In K. D. Vohs & R. F. Baumeister (Eds.), Handbook of self-regulation, 2nd ed.
- elstein, E. A., Ruhm, C. J., & Kosa, K. M. (2005). Economic causes and consequences of obesity. *Annual Review of Public Health*, 26, 239-257.
- bach, A., & Dhar, R. (2005). Goals as excuses or guides: The liberating effect of perceived goal progress on choice. *Journal of Consumer Research*, 32, 370-377.
- oach, A., Friedman, R. S., & Kruglanski, A. W. (2003). Leading us not unto temptation: Momentary allurements elicit overriding goal activation. *Journal* of Personality and Social Psychology, 84, 296-309.
- imons, G. M., & Bargh, J. A. (2003). Thinking of you: Nonconscious pursuit of interpersonal goals associated with relationship partners. *Journal of Personality and Social Psychology*, 84, 148-164.
- mons, G. M., & Finkel, E. J. (2010). Interpersonal influences on self-regulation. Current Directions in Psychological Science, 19, 101-105.
- mons, G. M., & Shah, J. Y. (2008). How goal instrumentality shapes relationship evaluations. *Journal of Personality & Social Psychology*, 95, 319–337.
- lman, P. G. (2000). Obesity as a medical problem. Nature, 404, 635-643.
- lanski, A. W., Shah, J. Y., Fishbach, A., Friedman, R., Chun, W. Y., & Sleeth-Keppler, D. (2002). A theory of goal systems. In M. P. Zanna (Ed.), Advances in experimental social psychology (Vol. 34, pp. 331-378). San Diego, CA: Academic Press.
- té, B., Williams, K., & Harkins, S. (1979). Many hands make light the work: The causes and consequences of social loafing. *Journal of Personality & Social Psychology*, 37, 822-832.
- 1, T., Tomiyama, A. J., Westling, E., Lew, A., Samuels, B., & Chatman, J. (2007). Medicare's search for effective obesity treatments: Diets are not the answer. *American Psychologist*, 62, 220-233.
- 1el, W. (1974). Processes in delay of gratification. In L. Berkowitz (Ed.), Advances in experimental social psychology (Vol. 7, pp. 249-292). New York: Academic.
- ven, M., & Baumeister, R. F. (2000). Self-regulation and depletion of limited resources: Does self-control resemble a muscle? *Psychological Bulletin*, 126, 247-259.
- ven, M., Gagné, M., & Rosman, H. (2008). Helpful self-control: Autonomy support, vitality, and depletion. *Journal of Experimental Social Psychology*, 44, 573-585.
- ven, M., Shmueli, D., & Burkley, E. (2006). Conserving self-control strength. Journal of Personality and Social Psychology, 91, 524–537.

- Diego, CA: Academic Press.
- Reblin, M., & Uchino, B. N. (2008). Social and emotional support and its implication for health. *Current Opinion in Psychiatry*, 21, 201-205.
- Richeson, J. A., & Trawalter, S. (2005). Why do interracial interactions impair executive function? A resource depletion account. *Journal of Personality and Social Psychology*, 88, 934-947.
- Rothman, A., Sheeran, P., & Wood, W. (2009). Reflective and automatic processes in the initiation and maintenance of dietary change. *Annals of Behavioural Medicine*, 38, S4-17.
- Rusbult, C. E., Finkel, E. J., & Kumashiro, M. (2009). The Michelangelo phenomenon. Current Directions in Psychological Science, 18, 305-309.
- Stroebe, W. (2008). Dieting, overweight, and obesity: Self-regulation in a food-rich environment. Washington, DC: American Psychological Association.
- Vohs, K. D., Baumeister, R. F., & Ciarocco, N. (2005). Self-regulation and self-presentation: Regulatory resource depletion impairs impression management and effortful self-presentation depletes regulatory resources. *Journal of Personality and Social Psychology*, 88, 632-657.
- Wegner, D. M., Erber, R., & Raymond, P. (1991). Transactive memory in close relationships. Journal of Personality and Social Psychology, 61, 923-929.